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REMARKS

The Examiner has rejected Claims 35, 41, 47, 48 52, 53, 58, 62, 67 and 70 under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. Applicant respectfully asserts that such rejection is moot in view of the cancellation of such claims.

The Examiner has rejected Claims 1, 7, 10, 16, 20, 24, 26, 30, 33, 34, 37, 39, 43, 46, 51, 57, 59, 61, 63, 66 and 69 under 35 U.S.C. 112, second paragraph, as being indefinite for including the term "substantial." Applicant respectfully asserts that such claim language is not indefinite in view of MPEP 2173.05(b). See below:

> "The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). ... The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988)."

Applicant respectfully asserts that "substantially identical" and "substantially continuous," as in the foregoing claims, are definite because one of ordinary skill in the art would know what is meant by such terms.

The Examiner has rejected Claims 1, 4-10, 13-20, 23-26, 29-33, 36-39 and 42-45 under 35 U.S.C. 103(a) as being unpatentable over Matsushita (EP Patent Application No. EP 1,096,714 A2) in view of Jones (U.S. Patent No. 5,623,637). Applicant respectfully disagrees with such rejection, especially in view of the amendments made to each of the independent claims. Specifically, applicant has amended each of the independent claims to substantially incorporate the subject matter of dependent Claim 8 et al.

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To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991). Applicant respectfully asserts that at least the first and third elements of the *prima facie* case of obviousness have not been met.

With respect to the first element of the *prima facie* case of obviousness, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time of the invention was filed to incorporate Matsushita with the ideas of Jones because "Jones merely describes the encryption and decryption of data and Matsushita describes a special way of encrypting and decrypting data (extracting frames of data and encrypting the individual frames) which is the typical way video and audio content is processed and stored." Thus, the Examiner concludes that when audio-video data is being recorded onto the memory card of Jones' system, it would be appropriate to frame the data and encrypt the individual frames for storage. Applicant respectfully disagrees with this proposition, especially in view of the vast evidence to the contrary.

For example, Matsushita relates to <u>video content encryption/decryption</u>, while Jones relates to <u>normal data encryption</u>. To simply glean features from <u>normal data encryption</u>, such as that of Jones, and combine the same with the *non-analogous art* of <u>video content encryption/decryption</u>, such as that of Matsushita, would simply be improper. The video content encryption/decryption of Matsushita is frame-based, and therefore would be incompatible with Jones' normal data encryption/decryption which is not frame-based. In addition, Matsushita's video content encryption/decryption requires selection signals <u>and</u> keys in order to function, whereas Jones merely teaches utilizing a public and private key to encrypt and decrypt. Thus, Jones' normal data

encryption/decryption would not work with Matsushita's video content encryption/decryption since Jones' invention does not allow for the necessary selection signals of Matsushita. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992)

In view of the vastly different types of problems a <u>video content</u> encryption/decryption method addresses as opposed to a <u>normal data</u> encryption/decryption method, the Examiner's proposed combination is inappropriate. Thus, contrary to the Examiner's arguments, applicant's claimed feature would have been unobvious, since Jones' <u>normal data encryption</u> *would not work with* Matsushita's <u>video content encryption/decryption</u>. *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986).

More importantly, with respect to the third element of the *prima facie* case of obviousness, applicant respectfully asserts that the prior art references, when combined, fail to teach or suggest <u>all</u> of the claim limitations. For example, with respect to dependent Claim 8 et al., the subject matter of which is presently incorporated into each of the independent claims, the Examiner has relied on the following excerpt from Jones to make a prior art showing of applicant's claimed "removable storage medium storing at least one of the encryption cryptographic key and the decryption cryptographic key, where the removable storage medium is removable with respect to the transportable storage medium" (see this or similar, but not identical, language in each of the foregoing claims).

"To provide additional security, the data transferred over the 16-bit data bus between the data bus buffer 173 and the gate 178 is processed by the encryption-decryption unit 177 which preferably implements a symmetrical key algorithm, such as DES, based on a key value which stored in and fetched from the EEPROM 275 in the smartcard I.C. 250." (Col. 6, lines 5-10)

Applicant respectfully asserts that the above excerpt from Jones does not meet applicant's claim language since Jones teaches that the key value is stored and fetched from the EEPROM in a smartcard IC. Such smartcard IC is located <u>on</u> a memory card (Figure 1, element 100), where <u>the memory card is removable from the computer unit</u>. This simply does not meet applicant's claim language since applicant claims a <u>removable storage medium</u> that stores at least one of the encryption cryptographic key and the decryption cryptographic key such that the removable storage medium is <u>removable with respect to a transportable storage medium</u>, as claimed, and not merely with respect to a computer system as in Jones.

Applicant further notes that the prior art is also deficient with respect to the dependent claims. For example, with respect to dependent Claim 9 et al., the Examiner has relied on the following excerpts from Jones and Matsushita to make a prior art showing of applicant's claimed "a set of cryptographic instructions stored on the removable storage medium and employing at least one of the encryption cryptographic key and the decryption cryptographic key."

"To provide additional security, the data transferred over the 16-bit data bus between the data bus buffer 173 and the gate 178 is processed by the encryption-decryption unit 177 which preferably implements a symmetrical key algorithm, such as DES, based on a key value which stored in and fetched from the EEPROM 275 in the smartcard I.C. 250." (Jones Col. 6, lines 5-10)

"[0019] It is therefore an object of the present invention to provide a contents data conversion apparatus which decrypts encrypted contents data including a plurality of frames at high speed, and also generates the encrypted contents data which has the same security levels as conventional ones.

(1) The above object is fulfilled by a contents data conversion apparatus for either encrypting or decrypting streams of contents data which are each divided into a plurality of frames, each frame including a piece of header information and a contents portion, the piece of header information including attribute information of the frame, all contents portions in each stream of contents data forming a content, the contents data conversion apparatus comprising: an acquisition unit operable to acquire one or more streams of contents data; an extraction unit operable to extract frames one by one from the one or more streams of contents data; a separation unit operable to separate each of the

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extracted frames into the piece of header information and the
contents portion; a conversion unit operable to either encrypt or
decrypt each contents portion to generate a converted contents
portion; and a combination unit operable to combine each piece of
header information with each converted contents portion, and
output a result of the combination." (Matsushita Col. 3, lines
25-52)

Again, applicant respectfully asserts that the key value in Jones is stored on a
smartcard IC which is not removable from the memory card. Only the memory card in
Jones is removable from a computer unit. Thus, applicant's claimed "removable storage
medium" has not been met, as noted above. In addition, Matsushita simply teaches
encrypting or decrypting a contents portion. Thus, applicant argues that neither Jones nor
Matsushita teach "a set of cryptographic instructions stored on the removable storage
medium," as claimed (emphasis added).

Since at least the third element of the *prima facie* case of obviousness has not
been met, a notice of allowance or a specific prior art showing of all of the claim
limitations, in the context of the remaining elements, is respectfully requested.

Still yet, applicant brings to the Examiner's attention the subject matter of new
Claims 73-78 below, which are added for full consideration:

"wherein the removable storage medium includes memory that is coupled
to a standardized connector which enables utilization of at least one of a plurality
of encryption cryptographic keys and a plurality of decryption cryptographic
keys" (see Claim 73);

"wherein during the recording a first cryptographic hash is generated from
at least one of the individual frames utilizing a one-way hashing function and the
at least one of the individual frames is encrypted utilizing the encryption
cryptographic key" (see Claim 74);

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"wherein during the playback the first cryptographic hash is retrieved and decrypted utilizing the decryption cryptographic key" (see Claim 75);

"wherein a second cryptographic hash is generated from the at least one of the individual frames and compared to the decrypted first cryptographic hash" (see Claim 76);

"wherein the video content is played if the first cryptographic hash and the second cryptographic hash match" (see Claim 77); and

"wherein the removable storage medium is removably coupled to a video tape cassette" (see Claim 78).

Again, a notice of allowance or a specific prior art showing of all of the claim limitations, in the context of the remaining elements, is respectfully requested.

Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No. NAI1P374/01.101.01).

Respectfully submitted,
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